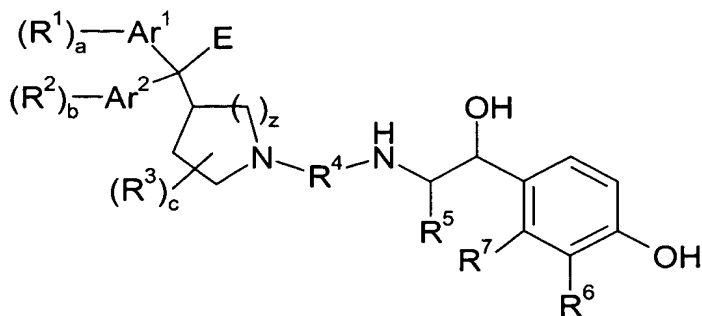


# ABSTRACT OF THE DISCLOSURE

This invention provides compounds of formula I:



I

wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $Ar^1$ ,  $Ar^2$ ,  $E$ ,  $a$ ,  $b$ ,  $c$  and  $z$  are as defined in the specification, or a pharmaceutically acceptable salt or solvate or stereoisomer thereof. The compounds of this invention possess both  $\beta_2$  adrenergic receptor agonist and muscarinic receptor antagonist activity and therefore, such compounds are useful for treating pulmonary disorders, such as chronic obstructive pulmonary disease and asthma.